

## REMARKS

By this amendment, Applicants have amended claim 11. As a result, claims 1-20 remain pending in this application. These amendments are being made to facilitate early allowance of the presently claimed subject matter. Applicants do not acquiesce in the correctness of the objections and rejections and reserve the right to pursue the full scope of the subject matter of the original claims, or claims that are potentially broader in scope, in the current and/or a related patent application. Reconsideration in view of the following remarks is respectfully requested.

In the Office Action, the Office rejects claims 11-16 under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. In particular, the Office alleges that the claimed system could be reasonably interpreted as software per se. By this response, Applicant has amended claim 11 to expressly include at least one computing device. As a result, Applicant respectfully requests withdrawal of the rejection of claims 11-16 under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter.

Further, the Office rejects claims 1-20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,990,666 (Hirschfeld). Because the Office fails to establish a *prima facie* case of obviousness, Applicants respectfully request withdrawal of the rejections of claims 1-20 for the following reasons.

For example, with respect to claim 1, the Office fails, *inter alia*, to show that Hirschfeld teaches or suggests determining a demand for a service as in claim 1. In support of its rejection, the Office cites col. 2, lines 43-61 of Hirschfeld and states that “demand by users for a server providing a service is an important factor in allocation resources.” However, the Office apparently confuses demand for a server, which is a physical resource and is discussed in Hirschfeld, with demand for a service. As previously argued by Applicants, “service” is a term

of art that refers to the functionality derived from a particular software program (see, e.g., service, TechEncyclopedia, The Computer Language Company, available at <http://www.techweb.com/encyclopedia/defineterm.jhtml?term=service> (accessed 17 July 2007)). Additionally, as previously argued by Applicants, a system, such as the server in Hirschfeld, can provide numerous services (as illustrated by claim 2), perform other functionality, and/or the like, each of which can impact the demand for a particular resource, such as the server in Hirschfeld. As a result, demand for the service does not necessarily directly correlate to the demand for the resource as implied by the Office. Further, a particular service may not require a substantial amount of a particular resource. In this case, the resource may experience a low demand while the demand for the service is high.

Further, the Office fails to show that Hirschfeld teaches or suggests provisioning a resource for the service based on the demand and an attribute of a system as in claim 1. The Office acknowledges that Hirschfeld fails to teach using a demand for a service to provision a resource. Office Action, p. 3, paragraph 8. However, the Office alleges that “it would have been obvious... to only utilize a demand and a single attribute. One would be motivated by the desire to simplify the provisioning of a resource.” *Id.* In support of its Official Notice, the Office cites Hirschfeld, col. 2, lines 43-61, which discusses approaches for providing sufficient physical resources to meet the demand requirements of multiple logical (virtual) server implementations.

Initially, Applicants submit that the Office improperly relies on the hindsight of Applicants’ claimed invention in support of its Official Notice. In particular, Hirschfeld only discusses demand for one or more resources (e.g., a server) in provisioning resources. As a result, a person of ordinary skill in the art would not be motivated by the teachings of Hirschfeld to utilize a different type of demand, e.g., the demand for a service as in claim 1, which is not

discussed in Hirschfeld. Further, since Hirschfeld is merely concerned with maximizing the utilization of physical resources underlying logical resources (see, e.g., Hirschfeld, col. 2, lines 55-61), a person of ordinary skill in the art would not be motivated by the teachings of Hirschfeld to look to a measure only tangentially related to the utilization of physical resources, namely, the demand for a service.

Further, the Office fails to provide sufficient evidentiary support for its position that “utiliz[ing] a demand [for a service] and a single attribute... would simplify the provisioning of a resource.” Office Action, p. 3, paragraph 8. To the contrary, Hirschfeld, col. 2, lines 43-61 discusses demand for physical resources for a logical server and its corresponding logical resources, not demand for a service as implied by the Office. See, e.g., Hirschfeld, col. 2, lines 40-43; 55-57. To this extent, Hirschfeld discusses alternative approaches to meeting the demands of logical servers and their weaknesses. Namely, Hirschfeld discusses provisioning sufficient physical resources to support all authorized demands of the logical servers simultaneously (col. 2, lines 43-46), and designing a server system based on peak usage of the logical servers (col. 2, lines 49-55). In both cases, Hirschfeld is concerned about having sufficient physical resources to meet the requirements of the logical resources tied thereto, and not the demand of any type of service as in claim 1.

In light of the above, either alone or in combination, Applicants respectfully request withdrawal of the rejections of claim 1 and claims 2-6, which depend therefrom as allegedly being unpatentable over Hirschfeld. In the alternative, should the Office maintain its rejection, Applicants request that the Office further explain where Hirschfeld discusses demand for a service and not demand for physical resources. Additionally, Applicants request that the Office provide evidentiary support for its Official Notice that the teachings of Hirschfeld, without the

benefit of the hindsight of Applicants' invention, teach or suggest that "utiliz[ing] a demand [for a service] and a single attribute... would simplify the provisioning of a resource."

With further respect to claim 2, the Office alleges that "information corresponding to dependencies and relationships between physical and logical resources" teaches "a demand for at least one other service sharing the resources" as in claim 2. Office Action, p. 3, paragraph 9. However, Applicants note that such information is entirely unrelated to demand for at least one other service as in claim 2. As a result, Applicants again respectfully request withdrawal of the rejection of claim 2 as allegedly being unpatentable over Hirschfeld. In the alternative, Applicants respectfully request that the Office further explain how information corresponding to dependencies and relationships between physical and logical resources allegedly teaches a demand for at least one other service sharing the resources.

With respect to claim 7, the Office fails to establish a *prima facie* case of obviousness in rejecting the claim. In particular, the Office relies on its rejections of claims 1-6. However, Applicants note that claim 7 is not commensurate in scope with any of claims 1-6. For example, claim 7 includes determining a set of attributes of the system, wherein the set of attributes comprises: a load on an image server, a load on a network used by the image server and a software server, and a second demand for at least one other service sharing the system. In contrast, claims 1-6 only require determining a single attribute of the system. The Office presents no argument in rejecting claims 1-6 that Hirschfeld teaches or suggests determining each of the set of attributes in claim 7 in combination, let alone using the set of attributes together with a first demand for a service in provisioning a resource for the service as in claim 7. As a result, Applicants respectfully request withdrawal of the rejections of claim 7 and claims 8-10, which depend therefrom, as allegedly being obvious in view of Hirschfeld. Alternatively, Applicants

respectfully request that the Office provide a particular reason why the Office believes Hirschfeld teaches or suggests such a modification proposed by the Office.

With respect to claims 11 and 17, Applicants note that the Office relies on its interpretation of Hirschfeld as allegedly teaching all the features of claim 1. To this extent, Applicants hereby incorporate the arguments presented above for claim 1. As a result, Applicants request withdrawal of the rejections of claims 11 and claims 12-16, which depend therefrom, and claim 17 and claims 18-20, which depend therefrom, as allegedly being unpatentable over Hirschfeld.

Applicants submit that each of the pending claims is patentable for one or more additional unique features. To this extent, Applicants do not acquiesce to the Office's interpretation of the claimed subject matter or the references used in rejecting the claimed subject matter.

Additionally, Applicants do not acquiesce to the Office's combinations and modifications of the various references or the motives cited for such combinations and modifications. These features and the appropriateness of the Office's combinations and modifications have not been separately addressed herein for brevity. However, Applicants reserve the right to present such arguments in a later response should one be necessary and/or in a related patent application, either of which may seek to obtain protection for claims of a potentially broader scope.

In light of the above, Applicants respectfully submit that all claims are in condition for allowance. Should the Examiner require anything further to place the application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the number listed below.

Respectfully submitted,

/John LaBatt/

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